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Title: "Status of the Visible Nulling Coronagraph Technology Demonstration Program"

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Abstract:

We report on the development, sensing and control of the Vacuum Nuller Testbed to realize a Visible Nulling Coronagraphy (VNC) for exoplanet detection and characterization. The VNC is one of the few approaches that works with filled, segmented and sparse or diluted-aperture telescope systems. It thus spans a range of potential future NASA telescopes and could be flown as a separate instrument on such a future mission. NASA/Goddard Space Flight Center has an established effort to develop VNC technologies, and an incremental sequence of testbeds to advance this approach and its critical technologies. We will highlight results demonstrating the achievement of our TDEM contrast milestones, and highlight the performance of our wavefront sensing and control concept.